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MARILOPTERYX CARANCAHUA, A NEW GENUS AND NEW SPECIES FROM EAST TEXAS (LEPIDOPTERA: NOCTUIDAE: HADENINAE)

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Abstract.—A new genus and new species of hadenine Noctuidae, ***Marilopteryx carancahua,*** is described from East Texas. The genus includes one other species occurring in the United States, *lutina* (Smith), new combination, from Florida, and a few tropical American species, all of which, except *lamptera* (Druce), new combination, are apparently undescribed.

The new species described here is one of the very striking moths that have been collected in recent years in Texas; its description is to be attributed to both authors. The new genus has been in manuscript by the junior author for a long time, and its description is to be attributed to him.

Marilopteryx Franclemont, New Genus

Type-species.—*Agrotis lamptera* Druce, 1890, **new combination.**

Diagnosis.—A genus in the large American complex that includes *Eriopyga* Guenée, 1852, *Chabuata* Walker, 1857 [1858], *Orthodes* Guenée, 1852, and relatives. Hampson, 1905 (vol. 5, p. 313) placed *lamptera* in *Eriopyga* to which there is some superficial similarity, but he gave it a section by itself. The genitalia of both sexes, especially those of the male, are strikingly different from those of *Eriopyga*. The males of *Marilopteryx* have the genitalia of a more or less normal configuration although with some special modifications; those of the males of *Eriopyga* have the valves much less sclerotized, extended laterally, and deeply cleft. The females of *Marilopteryx* have the sternum of the seventh abdominal segment highly modified and heavily sclerotized; those of *Eriopyga* have the sternum of the seventh abdominal segment little or not modified and no more heavily sclerotized than those of the other segments.

Description.—Head with vestiture deep, front rounded, ridge of scales above antennae, male antenna pubescent, with fine, short, closely set setae

of more or less equal length, female antenna with shorter pubescence, eye with hairs over entire surface, palpus with 1st segment short, 2nd segment moderate, upcurved to about middle of eye, 3rd segment short, porrect, haustellum well developed, strong; thorax with vestiture of hairlike scales and narrow, forked scales, a prominent median, longitudinal ridge from behind patagia, venation as figured by Hampson (1905, text fig. 70, p. 313), forewing with R_1 from beyond middle of discal cell, R_2 from near apex of accessory cell, R_3 and R_4 short stalked from apex of accessory cell, R_5 connate with stalk of $R_3 + R_4$, M_1 from upper angle of discal cell, hindwing with Rs and M_1 connate from upper angle of discal cell, M_2 obsolescent, M_3 and Cu_1 connate from lower angle of discal cell, discocellular veins more or less erect, legs of male with large tufts on femora and tibiae, especially the latter, tarsi with 3 rows of spines beneath, abdomen with vestiture of long hairlike scales overlying flat scales, male with evident lateral tufts on segments 1 through 6, dorsal tufts on segments 1 through 3, conspicuous caudal tufts, last sternum with large, spreading tuft from pocket, 1st sternum modified, usually with lateral hair-pencil on each side, female without tufts except those on dorsum, last sternum, 7th segment, highly modified, heavily sclerotized.

Male genitalia.—The species agree in basic structure with *carancahua* but with various individual modifications of tegumen, uncus, and aedoeagus. (The type of the genus, *lamptera*, is most similar to *carancahua*.)

Female genitalia.—The species agree with *carancahua*, differing in modifications of 7th abdominal sternum, sclerotization of ductus bursae, shape of bursa, and shape of appendix bursae.

Remarks.—The species of the genus are mostly dull reddish or reddish-brown moths with some grayish overtones; the new species described here has most of the examples grayish with a pink tint, but there are some reddish-brown ones, thus the name *Marilopteryx* (ember + wing).

In addition to the type-species and the new species the genus contains *Leucania lutina* Smith, 1902, **new combination** (*L. velutina* Smith, 1900, preoccupied), placed in *Tricholita* by McDunnough (1938: 73) and three or four undescribed species from the American tropics.

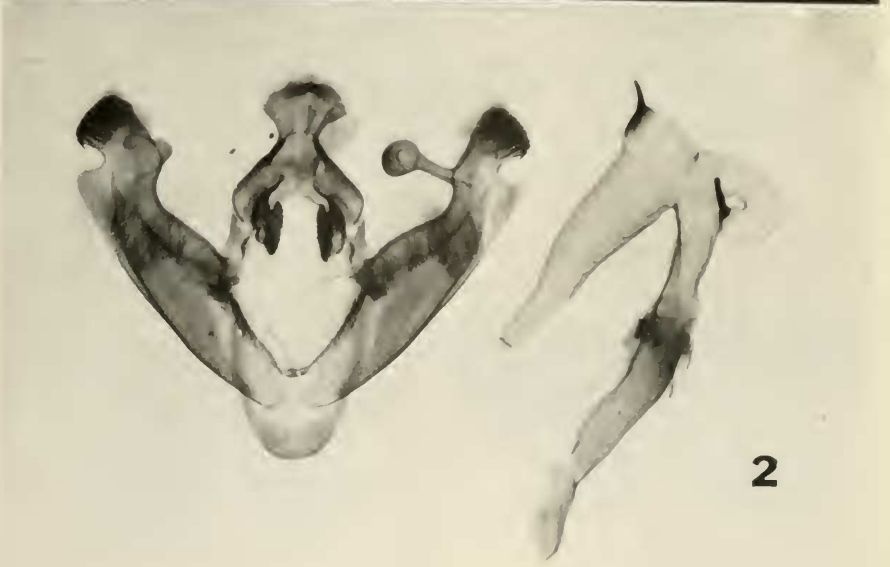
Marilopteryx carancahua Blanchard and Franclemont, New Species

Figs. 1–6

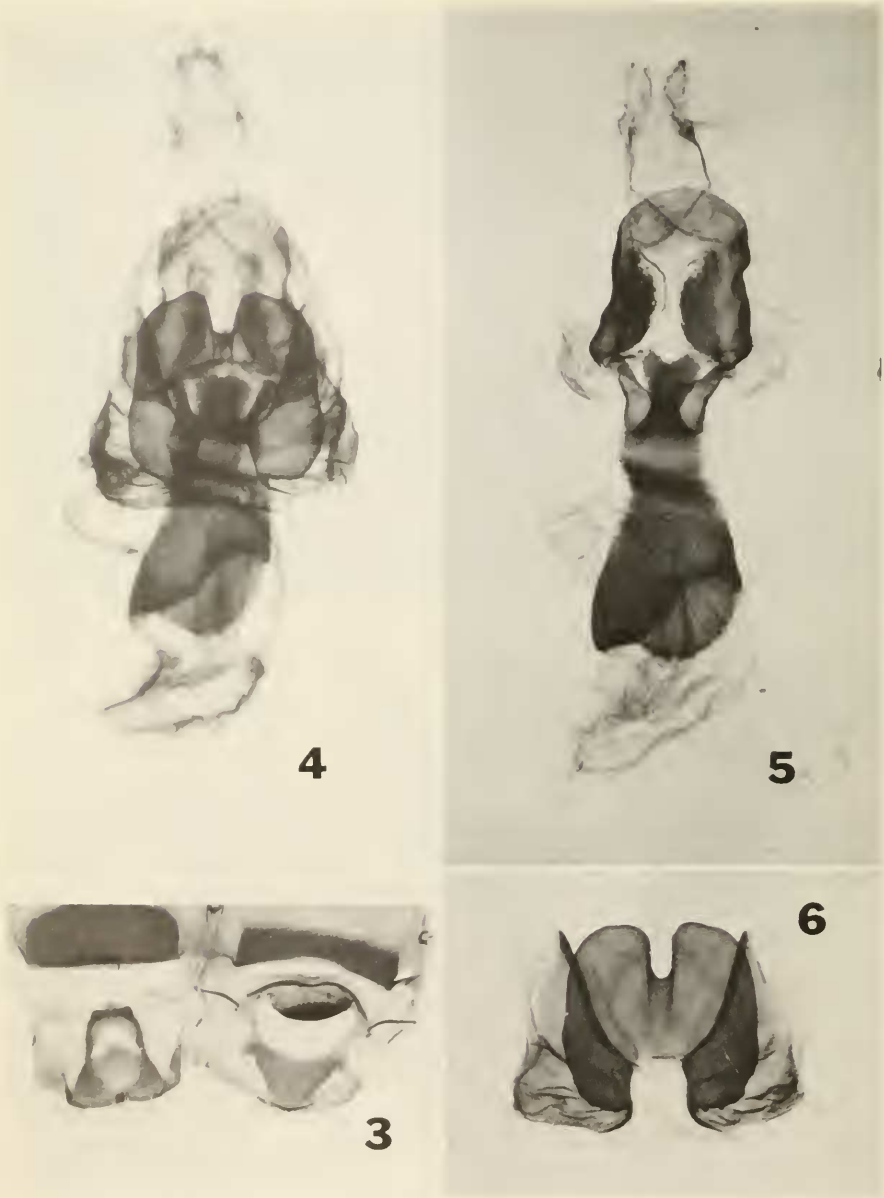
Diagnosis.—This species is most closely related to *lamptera* and an apparently undescribed species from Panama. It differs from *lamptera* in many obvious characters of the male genitalia. The expansion of the penicillus of the tegumen is highly rugose in *carancahua*; it is not rugose in *lamptera*. The upper lobe of the vinculum of *lamptera* is widely expanded, but that of *carancahua* is not. The cuculli of the valves of *carancahua* are two times the width of those of the valves of *lamptera*; the expanded lobe of the right

valve of *lamptera* is ligula-like in shape, not racquet shaped as is that of *carancahua*; the lobe of the left valve of *lamptera* is two times as wide as that of *carancahua*, and *lamptera* has an additional small, rounded lobe at the angulation of the cucullus with the longitudinal axis of each valve, but in *carancahua* in addition to the absence of the small lobe, the angulation of the cucullus is absent, and the cucullus is on the longitudinal axis of each valve. The vesica of the aedoeagus of *lamptera* has a single cornutus, not two cornuti as in *carancahua*. The male genitalia of the undescribed species from Panama have the rugose lobes of the penicilli smaller, the lobes of the valves much different in shape, and the uncus with two long projections. The only other species, *lutina*, occurring in the United States differs from *carancahua* in having the male genitalia with very small cuculli, very small lobes on the valves, and a narrow uncus. The females of *carancahua*, *lutina*, and *lamptera* have the seventh abdominal sternum of the same basic confirmation; that of *carancahua* is more or less quadrate with the apical excavation broad; that of *lutina* is somewhat oval, flattened at the base, and with the excavation narrow; and that of *lamptera* has the lobes prolonged and the excavation broad. The ductus bursae of *lutina* and that of *lamptera* are longer and narrower than that of *carancahua*; the appendix bursae of *lutina* is much longer than those of *carancahua* and *lamptera*; *lutina* has a separate, longitudinal, sclerotized plate near the origin of the appendix bursae. The female of the Panamanian species is not known to us. Superficially *carancahua* is unique in the possession of the conspicuous black spot in the subterminal line and the somewhat sinuous, slightly irregular antemedial and post medial lines which in all the other species, except the Panamanian, are straight from costa to inner margin.

Description.—Head, patagia, disc of thorax, and tegulae concolorous with ground color of forewing, palpus with 1st and 2nd segments reddish black, upper margin of 2nd segment and all of 3rd segment light tan, all segments with some reddish scales, behind, below, and in front of eye black, pale above; forewing varying from ashy, olive gray with just a faint pinkish tinge to dark vinaceous red, color uniform on any one specimen, all steps in variation present from extremes, basal, antemedial, and postmedial lines double, filling between darker lines ground color or slightly paler, basal line traceable from costa to cubital vein, outer of 2 lines often faint, antemedial line crenulate, forming 3 loops, black dots on vague outer line on Cu and 2nd A, postmedial line slightly excurved to M_3 then incurved to inner margin, vague outer line followed by black points on veins M_1 through 2nd A, often with an indication of one on R_5, median shade often obsolescent, dusky, angled from costa to inner side of reniform then straight to inner margin, subterminal line irregularly wavy, paler than ground, often with considerable white scaling, conspicuous black spot on inner side of subterminal line between veins M_1 and M_2, often with smaller black spots between



Figs. 1, 2. *Marilopteryx carancahua*. 1, Holotype, Deutchburg, Jackson Co., Texas, 6 March 1975, A. & M. E. Blanchard; collection USNM. 2, Male genitalia with aedoeagus removed, aedoeagus with vesica everted at right; genitalia slide AB 3618.



Figs. 3–6. *Marilopteryx carancahua*. 3, Male abdomen, 8th abdominal segment, sternum (right) and tergum (left); genitalia slide AB 3618. 4, Female genitalia, 7th abdominal segment in place; genitalia slide AB 3279. 5, Female genitalia, 7th abdominal segment removed; genitalia slide AB 3620. 6, Female, 7th abdominal segment, modified sternum; genitalia slide AB 3620.

veins M_2 and M_3 and between veins R_5 and M_1, sometimes other small black spots toward costa, terminal line a series of small black dots in the interspaces between the veins connected by a very fine, dentate, black line, fringe concolorous with ground, reniform and orbicular large, with inconspicuous, pale annuli, reniform barely darker than ground; orbicular no darker than ground, often not discernible; hindwing much less variable than forewing, vinaceous gray, heavily infuscate toward outer margin, veins contrasting, blackish, discal dot moderate, fringe pinkish; dorsum of abdomen tending to agree in color with ground of forewing, with some darker scales and hairlike scales, terminal and lateral tufts of male with a decided reddish tint. Beneath: forewing dark gray, paler toward extreme base, a conspicuous postmedial line and discal spot, veins pale scaled beyond postmedial line; hindwing sordid, pinkish gray, darker beyond conspicuous, dark, punctate postmedial line, discal spot punctiform, dark, fringe of both wings much as above, of hindwing less contrasting.

Expanse.—Male, 36.5–40.5 mm, female, 35.4–41.4 mm; forewing length 20.5–23 mm.

Male genitalia.—As figured; Fig. 3 illustrates sclerotized areas of tergum and sternum of 8th abdominal segment, sternum, on right, shows pocket (dark) from which large tuft arises.

Female genitalia.—As figured; Fig. 4 illustrates genitalia with 7th sternum in place; Fig. 5 illustrates genitalia with sternum removed, sclerotization of ductus bursae visible, ligulate plate, excavated at apex, is on back (upper) wall of ductus; Fig. 6 illustrates the modified 7th sternum, a more or less quadrate ventral plate with wide apical excavation and 2 apically pointed, more dorsad, lateral plates.

Holotype.—Male (Fig. 1). Deutchburg [near Carancahua Creek], Jackson County, Texas, 6 March 1975, A. & M. E. Blanchard. In the National Museum of Natural History, Washington, D.C.

Paratypes.—45 ♂, 10 ♀; 54: Deutchburg, Jackson County, Texas, 14 March 1975 (1), 18 March 1974 (8), 3 March 1975 (18), 6 March 1975 (26), 15 March 1977 (1); 1: Eagle Lake, Colorado County, Texas, 27 April 1978; A. & M. E. Blanchard. Paratypes are in the following collections: American Museum of Natural History, New York (2), British Museum (Natural History), London (2), Canadian National Collection, Ottawa (2), National Museum of Natural History (27), A. Blanchard (12), E. C. Knudson (2), J. G. Franclemont (8).

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